IN THE ABSTRACT:

~~A~~ The transmitter (4) ~~for a controlled-shape switched signal on a communication line (1)~~ comprises a signal generator including a capacitor (19) producing the switched signal to be applied to the line. The capacitor is charged by a charging current (I_G) in response to an input signal ~~(TX)~~ so as to define an edge of the switched signal. ~~The charging means (24, 25) comprises~~ through a feedback loop responsive to the capacitor voltage ~~(V_O) for~~ generating a feedback current (I_E) having a continuous magnitude that is a progressive function of the capacitor voltage, the charging current (I_G) being a function of the feedback current (I_E). ~~Resistors (R, R₁, R₂) define an RC circuit with the capacitor (19) enabling the time constant of the feedback current to be controlled. Preferably, the~~ The feedback loop generates first and second feedback voltages (V_H, V_L) one of which is a rising function of the capacitor voltage (V_O) and the other is a falling function of the capacitor voltage (V_O). The feedback current (I_E) is generated first as a function of one of the feedback voltages (V_H, V_L) and subsequently as a function of the other of the feedback voltages, ~~so that the rate of change of the feedback current (I_E) increases with time while the one of the feedback voltages is selected and decreases with time while the other of the feedback voltages is selected.~~

~~Preferably, the rate of change of the feedback current (I_E) is a function of the capacitor voltage (V_O) such that the capacitor voltage varies substantially as an exponential function of time, at least for a part of the edge of the switched signal (40, 42, 44, 46) and may be a linear function of time for another part (41, 43, 45) so as to approximate closely a sinusoidal half cycle with few harmonics.~~